

Exhibit 11

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
50-00-0	Formaldehyde	1	Sup 7, 62, 88, 100F	2012	
50-06-6	Phenobarbital	2B	Sup 7, 79	2001	
50-07-7	Mitomycin C	2B	10, Sup 7	1987	
50-18-0 6055-19-2	Cyclophosphamide	1	26, Sup 7, 100A	2012	
50-29-3	DDT (4,4'-dichlorodiphenyltrichloroethane)	2A	Sup 7, 53, 113	2018	
50-32-8	Benzo[<i>a</i>]pyrene	1	Sup 7, 92, 100F	2012	NB: Overall evaluation upgraded to Group 1 based on mechanistic and other relevant data
50-33-9	Phenylbutazone	3	13, Sup 7	1987	
50-41-9	Clomiphene citrate	3	21, Sup 7	1987	
50-44-2	6-Mercaptopurine	3	26, Sup 7	1987	
50-55-5	Reserpine	3	24, Sup 7	1987	
50-76-0	Actinomycin D	3	10, Sup 7	1987	
51-02-5	Pronetalol hydrochloride	3	13, Sup 7	1987	
51-03-6	Piperonyl butoxide	3	30, Sup 7	1987	
51-18-3	2,4,6-Tris(1-aziridinyl)- <i>s</i> -triazine	3	9, Sup 7	1987	
51-21-8	5-Fluorouracil	3	26, Sup 7	1987	
51-52-5	Propylthiouracil	2B	Sup 7, 79	2001	
51-75-2	Nitrogen mustard	2A	9, Sup 7	1987	
51-79-6	Ethyl carbamate (Urethane)	2A	7, Sup 7, 96	2010	
52-01-7	Spironolactone	3	Sup 7, 79	2001	
52-24-4	Thiotepa	1	Sup 7, 50, 100A	2012	
52-46-0	Apholate	3	9, Sup 7	1987	
52-68-6	Trichlorfon	3	30, Sup 7	1987	
53-03-2	Prednisone	3	26, Sup 7	1987	
53-70-3	Dibenz[<i>a,h</i>]anthracene	2A	Sup 7, 92	2010	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
54-05-7	Chloroquine	3	13, Sup 7	1987	
54-31-9	Furosemide (Frusemide)	3	50	1990	
54-85-3	Isonicotinic acid hydrazide (Isoniazid)	3	4, Sup 7	1987	
55-18-5	<i>N,N</i> -Nitrosodiethylamine	2A	17, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
55-98-1	1,4-Butanediol dimethanesulfonate (see Busulfan)				
55-98-1	Busulfan	1	4, Sup 7, 100A	2012	
55-98-1	Myleran (see Busulfan)				
56-04-2	Methylthiouracil	2B	Sup 7, 79	2001	
56-23-5	Carbon tetrachloride	2B	20, Sup 7, 71	1999	
56-25-7	Cantharidin	3	10, Sup 7	1987	
56-38-2	Parathion	2B	30, Sup 7, 112	2017	
56-53-1	Diethylstilbestrol	1	21, Sup 7, 100A	2012	
56-55-3	Benz[<i>a</i>]anthracene	2B	92, Sup 7	2010	
56-75-7	Chloramphenicol	2A	Sup 7, 50	1990	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
57-06-7	Allyl isothiocyanate	3	73, Sup 7	1999	
57-14-7	1,1-Dimethylhydrazine	2B	4, Sup 7, 71	1999	
57-39-6	Tris(2-methyl-1-aziridinyl)phosphine oxide	3	9, Sup 7	1987	
57-41-0	Phenytion	2B	Sup 7, 66	1996	
57-57-8	beta-Propiolactone	2B	4, Sup 7, 71	1999	
57-68-1	Sulfamethazine	3	79	2001	NB: Overall evaluation downgraded to Group 3 with supporting evidence from other relevant data
57-74-9	Chlordane	2B	Sup 7, 53, 79	2001	
57-88-5	Cholesterol	3	31, Sup 7	1987	
58-08-2	Caffeine	3	51	1991	
58-14-0	Pyrimethamine	3	13, Sup 7	1987	
58-55-9	Theophylline	3	51	1991	
58-89-9	Lindane (see also Hexachlorocyclohexanes)	1	113	2018	
58-93-5	Hydrochlorothiazide	2B	50, 108	2016	
59-05-2	Methotrexate	3	26, Sup 7	1987	
59-87-0	Nitrofurantoin (Nitrofurazone)	3	50	1990	
59-89-2	<i>N,N</i> -Nitrosomorpholine	2B	17, Sup 7	1987	
60-09-3	<i>para</i> -Aminoazobenzene	2B	8, Sup 7	1987	
60-11-7	<i>para</i> -Dimethylaminoazobenzene	2B	8, Sup 7	1987	
60-35-5	Acetamide	2B	7, Sup 7, 71	1999	
60-56-0	Methimazole	3	79	2001	
60-57-1	Dieldrin (see Dieldrin, and aldrin metabolized to dieldrin)				
60-57-1, 309-00-2	Dieldrin, and aldrin metabolized to dieldrin	2A	5, Sup 7, 117	2019	
61-57-4	Niridazole	2B	13, Sup 7	1987	
61-82-5	Amitrole	3	79, Sup 7	2001	NB: Overall evaluation downgraded to Group 3 with supporting evidence from other relevant data
62-44-2	Phenacetin	1	24, Sup 7, 100A	2012	NB: Overall evaluation upgraded to Group 1 with supporting evidence from other relevant data
62-50-0	Ethyl methanesulfonate	2B	7, Sup 7	1987	
62-53-3	Aniline	3	27, Sup 7	1987	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
62-55-5	Thioacetamide	2B	7, Sup 7	1987	
62-56-6	Thiourea	3	Sup 7, 79	2001	
62-73-7	Dichlorvos	2B	Sup 7, 53	1991	
62-75-9	<i>N</i>-Nitrosodimethylamine	2A	17, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
63-25-2	Carbaryl	3	12, Sup 7	1987	
63-92-3	Phenoxybenzamine hydrochloride	2B	24, Sup 7	1987	
64-17-5	Ethanol in alcoholic beverages	1	96, 100E	2012	
64-67-5	Diethyl sulfate	2A	54, 71	1999	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
66-27-3	Methyl methanesulfonate	2A	7, Sup 7, 71	1999	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
66-75-1	Uracil mustard	2B	9, Sup 7	1987	
67-20-9	Nitrofurantoin	3	50	1990	
67-45-8	Furazolidone	3	31, Sup 7	1987	
67-63-0	Isopropyl alcohol	3	15, Sup 7, 71	1999	
67-66-3	Chloroform	2B	Sup 7, 73	1999	
67-72-1	Hexachloroethane	2B	73	1999	
68-12-2	<i>N</i>-Dimethylformamide	2A	47, 71, 115	2018	
68-76-8	Tris(aziridinyl)-<i>para</i>-benzoquinone (Triaziquone)	3	9, Sup 7	1987	
69-53-4	Ampicillin	3	50	1990	
70-25-7	<i>N</i>-Methyl-<i>N</i>-nitro-<i>N</i>-nitrosoguanidine (MNNG)	2A	4, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
70-30-4	Hexachlorophene	3	20, Sup 7	1987	
71-43-2	Benzene	1	29, Sup 7, 100F, 120	2018	
71-55-6	1,1,1-Trichloroethane	3	20, Sup 7, 71	1999	
71-58-9	Medroxyprogesterone acetate	2B	21, Sup 7	1987	
72-20-8	Endrin	3	5, Sup 7	1987	
72-43-5	Methoxychlor	3	20, Sup 7	1987	
72-57-1	Trypan blue	2B	8, Sup 7	1987	
74-83-9	Methyl bromide	3	41, Sup 7, 71	1999	
74-85-1	Ethylene	3	Sup 7, 60	1994	
74-87-3	Methyl chloride	3	41, Sup 7, 71	1999	
74-88-4	Methyl iodide	3	41, Sup 7, 71	1999	
74-96-4	Bromoethane	3	52, 71	1999	
75-00-3	Chloroethane	3	52, 71	1999	
75-01-4	Vinyl chloride	1	Sup 7, 97, 100F	2012	
75-02-5	Vinyl fluoride	2A	Sup 7, 63, 97	2008	NB: (1) Overall evaluation upgraded to Group 2A based on mechanistic and other relevant data; (2) For practical purposes, vinyl fluoride should be considered to act similarly to the human carcinogen vinyl chloride
75-07-0	Acetaldehyde	2B	36, Sup 7, 71	1999	
75-07-0	Acetaldehyde associated with consumption of alcoholic beverages	1	100E	2012	
75-09-2	Dichloromethane (Methylene chloride)	2A	Sup 7, 71, 110	2017	
75-21-8	Ethylene oxide	1	Sup 7, 60, 97, 100F	2012	NB: Overall evaluation upgraded to Group 1 based on mechanistic and other relevant data
75-25-2	Bromoform	3	52, 71	1999	
75-27-4	Bromodichloromethane	2B	52, 71	1999	
75-35-4	Vinylidene chloride	2B	39, Sup 7, 71, 119	2019	
75-38-7	Vinylidene fluoride	3	39, Sup 7, 71	1999	
75-45-6	Chlorodifluoromethane	3	41, Sup 7, 71	1999	
75-52-5	Nitromethane	2B	77	2000	
75-55-8	2-Methylaziridine (Propyleneimine)	2B	9, Sup 7, 71	1999	
75-56-9	Propylene oxide	2B	Sup 7, 60	1994	
75-60-5	Dimethylarsinic acid	2B	100C	2012	
75-87-6	Chloral	2A	63, 84, 106	2014	
75-88-7	2-Chloro-1,1,1-trifluoroethane	3	41, Sup 7, 71	1999	
76-01-7	Pentachloroethane	3	41, Sup 7, 71	1999	
76-03-9	Trichloroacetic acid	2B	63, 84, 106	2014	
76-44-8	Heptachlor	2B	Sup 7, 53, 79	2001	
77-09-8	Phenolphthalein	2B	76	2000	
77-78-1	Dimethyl sulfate	2A	4, Sup 7, 71	1999	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
78-79-5	Isoprene	2B	60, 71	1999	
78-87-5	1,2-Dichloropropane	1	41, Sup 7, 71, 110	2017	
78-98-8	Methylglyoxal	3	51	1991	
79-00-5	1,1,2-Trichloroethane	3	52, 71	1999	
79-01-6	Trichloroethylene	1	Sup 7, 63, 106	2014	
79-06-1	Acrylamide	2A	60, Sup 7	1994	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
79-10-7	Acrylic acid	3	19, Sup 7, 71	1999	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
79-34-5	1,1,2,2-Tetrachloroethane	2B	20, Sup 7, 71, 106	2014	
79-43-6	Dichloroacetic acid	2B	63, 84, 106	2014	
79-44-7	Dimethylcarbamoyl chloride	2A	12, Sup 7, 71	1999	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
79-46-9	2-Nitropropane	2B	29, Sup 7, 71	1999	
79-94-7	Tetrabromobisphenol A	2A	115	2018	
80-08-0	Dapsone	3	24, Sup 7	1987	
80-62-6	Methyl methacrylate	3	Sup 7, 60	1994	
81-07-2	Saccharin and its salts	3	Sup 7, 73	1999	NB: Overall evaluation downgraded to Group 3 with supporting evidence from other relevant data
81-15-2	Musk xylene	3	65	1996	
81-49-2	1-Amino-2,4-dibromoanthraquinone	2B	101	2013	
81-88-9	Rhodamine B	3	16, Sup 7	1987	
82-28-0	1-Amino-2-methylantraquinone	3	27, Sup 7	1987	
82-68-8	Quintozene (Pentachloronitrobenzene)	3	5, Sup 7	1987	
83-32-9	Acenaphthene	3	92	2010	
83-63-6	Diacetylaminoazotoluene	3	8, Sup 7	1987	
83-66-9	Musk ambrette	3	65	1996	
83-67-0	Theobromine	3	51	1991	
84-65-1	Anthraquinone	2B	101	2013	
85-01-8	Phenanthrene	3	Sup 7, 92	2010	
85-68-7	Butyl benzyl phthalate	3	Sup 7, 73	1999	
85-83-6	Scarlet Red	3	8, Sup 7	1987	
85-84-7	Yellow AB	3	8, Sup 7	1987	
85-86-9	Sudan III	3	8, Sup 7	1987	
86-30-6	<i>N,N'</i> -Nitrosodiphenylamine	3	27, Sup 7	1987	
86-54-4	Hydralazine	3	24, Sup 7	1987	
86-57-7	1-Nitronaphthalene	3	46	1989	
86-73-7	Fluorene	3	Sup 7, 92	2010	
86-74-8	Carbazole	2B	32, Sup 7, 71, 103	2013	
86-88-4	1-Naphthylthiourea (ANTU)	3	30, Sup 7	1987	
87-29-6	Cinnamyl anthranilate	3	Sup 7, 77	2000	
87-62-7	2,6-Dimethylaniline (2,6-Xylidine)	2B	57	1993	
87-68-3	Hexachlorobutadiene	3	73	1999	
87-86-5	Pentachlorophenol (see also Polychlorophenols)	1	53, 71, 117	2019	
88-05-1	2,4,6-Trimethylaniline	3	27, Sup 7	1987	
88-06-2	2,4,6-Trichlorophenol (see also Polychlorophenols)	2B	117	2019	
88-12-0	<i>N,N'</i> -Vinyl-2-pyrrolidone	3	19, Sup 7, 71	1999	
88-72-2	2-Nitrotoluene	2A	101	2013	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
88-73-3 121-73-3 100-00-5	Chloronitrobenzenes (see 2-Chloronitrobenzene, 3-Chloronitrobenzene, 4-Chloronitrobenzene)				
88-73-3	2-Chloronitrobenzene	2B	65, 123	In prep.	
89-61-2	1,4-Dichloro-2-nitrobenzene	2B	65, 123	In prep.	
89-82-7	Pulegone	2B	108	2016	
90-04-0	<i>ortho</i> -Anisidine	2B	Sup 7, 73	1999	
90-43-7	<i>ortho</i> -Phenylphenol	3	73	1999	
90-65-3	Penicillic acid	3	10, Sup 7	1987	
90-94-8	Michler's ketone [4,4'-Bis(dimethylamino)-benzophenone]	2B	99	2010	
91-20-3	Naphthalene	2B	82	2002	
91-22-5	Quinoline	2B	121	In prep.	
91-23-6	2-Nitroanisole	2B	65	1996	
91-59-8	2-Naphthylamine	1	4, Sup 7, 99, 100F	2012	
91-64-5	Coumarin	3	Sup 7, 77	2000	
91-93-0	3,3'-Dimethoxybenzidine-4,4'-diisocyanate	3	39, Sup 7	1987	
91-94-1	3,3'-Dichlorobenzidine	2B	29, Sup 7	1987	
92-67-1	4-Aminobiphenyl	1	1, Sup 7, 99, 100F	2012	
92-87-5	Benzidine	1	29, Sup 7, 99, 100F	2012	
92-93-3	4-Nitrobiphenyl	3	4, Sup 7	1987	
93-15-2	Methyleugenol	2B	101	2013	
94-36-0	Benzoyl peroxide	3	36, Sup 7, 71	1999	
94-58-6	Dihydrosafrole	2B	10, Sup 7	1987	
94-59-7	Safrole	2B	10, Sup 7	1987	
94-75-7	2,4-D (2,4-dichlorophenoxyacetic acid) (See also Chlorophenoxy herbicides)	2B	113	2018	
95-06-7	Sulfallate	2B	30, Sup 7	1987	
95-50-1	<i>ortho</i> -Dichlorobenzene	3	Sup 7, 73	1999	
95-53-4	<i>ortho</i> -Toluidine	1	Sup 7, 77, 99, 100F	2012	
95-54-5	<i>ortho</i> -Phenylenediamine	2B	123	In prep.	
95-68-1	2,4-Xylidine	3	16, Sup 7	1987	
95-69-2	4-Chloro- <i>ortho</i> -toluidine	2A	77, 99	2010	
95-70-5	2,5-Diaminotoluene	3	16, Sup 7	1987	
95-78-3	2,5-Xylidine	3	16, Sup 7	1987	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
95-79-4	5-Chloro- <i>ortho</i> -toluidine	3	77, 99	2010	
95-80-7	2,4-Diaminotoluene	2B	16, Sup 7	1987	
95-83-0	4-Chloro- <i>ortho</i> -phenylenediamine	2B	27, Sup 7	1987	
95-85-2	2-Amino-4-chlorophenol	2B	123	In prep.	
96-09-3	Styrene-7,8-oxide	2A	Sup 7, 60, 121	In prep.	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
96-12-8	1,2-Dibromo-3-chloropropane	2B	20, Sup 7, 71	1999	
96-13-9	2,3-Dibromopropan-1-ol	2B	77	2000	
96-18-4	1,2,3-Trichloropropane	2A	63	1995	
96-23-1	1,3-Dichloro-2-propanol	2B	101	2013	
96-24-2	3-Monochloro-1,2-propanediol	2B	101	2013	
96-33-3	Methyl acrylate	2B	39, Sup 7, 71, 122	In prep.	
96-45-7	Ethylenethiourea	3	Sup 7, 79	2001	NB: Overall evaluation downgraded to Group 3 with supporting evidence from other relevant data
96-48-0	gamma-Butyrolactone	3	11, Sup 7, 71	1999	
97-53-0	Eugenol	3	36, Sup 7	1987	
97-56-3	<i>ortho</i> -Aminoazotoluene	2B	8, Sup 7	1987	
97-77-8	Disulfiram	3	12, Sup 7	1987	
98-00-0	Furfuryl alcohol	2B	119	2019	
98-01-1	Furfural	3	63	1995	
98-82-8	Cumene	2B	101	2013	
98-83-9	a-Methylstyrene	2B	101	2013	
98-87-3 98-07-7 100-44-7 98-88-4	alpha-Chlorinated toluenes (benzal chloride, benzotrichloride, benzyl chloride) and benzoyl chloride (combined exposures)	2A	29, Sup 7, 71	1999	
98-95-3	Nitrobenzene	2B	65	1996	
99-08-1 99-99-0	Nitrotoluenes	3	65	1996	
99-55-8	5-Nitro- <i>ortho</i> -toluidine	3	48	1990	
99-56-9	1,2-Diamino-4-nitrobenzene	3	16, Sup 7	1987	
99-57-0	2-Amino-4-nitrophenol	3	57	1993	
99-59-2	5-Nitro- <i>ortho</i> -anisidine	3	27, Sup 7	1987	
99-80-9	<i>N</i> -Methyl- <i>N</i> -4-dinitrosoaniline	3	1, Sup 7	1987	
99-97-8	<i>N</i> , <i>N</i> -Dimethyl- <i>p</i> -toluidine	2B	115	2018	
100-00-5	4-Chloronitrobenzene	2B	65, 123	In prep.	
100-17-4	<i>para</i> -Nitroanisole	2B	123	In prep.	
100-40-3	4-Vinylcyclohexene	2B	Sup 7, 60	1994	
100-41-4	Ethylbenzene	2B	77	2000	
100-42-5	Styrene	2A	60, 82, 121	In prep.	
100-75-4	<i>N</i> -Nitrosopiperidine	2B	17, Sup 7	1987	
101-14-4	4,4'-Methylenebis(2-chloroaniline) (MOCA)	1	Sup 7, 57, 99, 100F	2012	NB: Overall evaluation upgraded to Group 1 based on mechanistic and other relevant data
101-21-3	Chloropropanol	3	12, Sup 7	1987	
101-25-7	Dinitrosopentamethylenetetramine	3	11, Sup 7	1987	
101-61-1	Michler's base [4,4'-methylenebis(<i>N</i> , <i>N</i> -dimethyl)-benzenamine]	2B	27, Sup 7, 99	2010	
101-68-8	4,4'-Methylenediphenyl diisocyanate	3	19, Sup 7, 71	1999	
101-77-9	4,4'-Methylenedianiline	2B	39, Sup 7	1987	
101-80-4	4,4'-Diaminodiphenyl ether	2B	29, Sup 7	1987	
101-90-6	Diglycidyl resorcinol ether	2B	36, Sup 7, 71	1999	
102-50-1	<i>meta</i> -Cresidine	3	27, Sup 7	1987	
102-71-6	Triethanolamine	3	77	2000	
103-03-7	Phenicarbazide	3	12, Sup 7	1987	
103-11-7	2-Ethylhexyl acrylate	2B	60, 122	In prep.	
103-23-1	Di(2-ethylhexyl) adipate	3	Sup 7, 77	2000	
103-33-3	Azobenzene	3	8, Sup 7	1987	
103-90-2	Acetaminophen (see Paracetamol)				
103-90-2	Paracetamol (Acetaminophen)	3	50, 73	1999	
104-94-9	<i>para</i> -Anisidine	3	27, Sup 7	1987	
105-11-3	<i>para</i> -Benzoquinone dioxime	3	29, Sup 7, 71	1999	
105-55-5	<i>N</i> , <i>N</i> -Diethylthiourea	3	79	2001	
105-60-2	Caprolactam	3	39, Sup 7, 71	1999	Moved to Group 3 following 2019 update to the IARC Monographs Preamble
105-74-8	Lauroyl peroxide	3	36, Sup 7, 71	1999	
106-46-7	<i>para</i> -Dichlorobenzene	2B	Sup 7, 73	1999	
106-47-8	<i>para</i> -Chloroaniline	2B	57	1993	
106-50-3	<i>para</i> -Phenylenediamine	3	16, Sup 7	1987	
106-51-4	<i>para</i> -Quinone	3	15, Sup 7, 71	1999	
106-87-6	4-Vinylcyclohexene diepoxide	2B	Sup 7, 60	1994	
106-88-7	1,2-Epoxybutane	2B	47, 71	1999	NB: Overall evaluation upgraded to Group 2B with supporting evidence from other relevant data
106-89-8	Epichlorohydrin	2A	11, Sup 7, 71	1999	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
106-93-4	Ethylene dibromide	2A	15, Sup 7, 71	1999	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
106-94-5	1-Bromopropane	2B	115	2018	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
106-99-0	1,3-Butadiene	1	Sup 7, 54, 71, 97, 100F	2012	
107-02-8	Acrolein	3	63, Sup 7	1995	
107-05-1	Allyl chloride	3	36, Sup 7, 71	1999	
107-06-2	1,2-Dichloroethane	2B	20, Sup 7, 71	1999	
107-13-1	Acrylonitrile	2B	71	1999	
107-14-2	Chloroacetonitrile	3	52, 71	1999	
107-30-2	Chloromethyl methyl ether (see Bis(chloromethyl)ether; chloromethyl methyl ether)				
108-05-4	Vinyl acetate	2B	Sup 7, 63	1995	
108-10-1	Methyl isobutyl ketone	2B	101	2013	
108-30-5	Succinic anhydride	3	15, Sup 7	1987	
108-45-2	<i>meta</i>-Phenylenediamine	3	16, Sup 7	1987	
108-46-3	Resorcinol	3	15, Sup 7, 71	1999	
108-60-1	Bis(2-chloro-1-methylethyl)ether	3	41, Sup 7, 71	1999	
108-78-1	Melamine	2B	Sup 7, 73, 119	2019	
108-88-3	Toluene	3	47, 71	1999	
108-94-1	Cyclohexanone	3	47, 71	1999	
108-95-2	Phenol	3	47, 71	1999	
108-99-6	β -Picoline	3	122	In prep.	
109-99-9	Tetrahydrofuran	2B	119	2019	
110-00-9	Furan	2B	63	1995	
110-57-6	<i>trans</i>-1,4-Dichlorobutene	3	15, Sup 7, 71	1999	
110-86-1	Pyridine	2B	77, 119	2019	
110-91-8	Morpholine	3	47, 71	1999	
111-42-2	Diethanolamine	2B	77, 101	2013	
111-44-4	Bis(2-chloroethyl)ether	3	9, Sup 7, 71	1999	
111-76-2	2-Butoxyethanol	3	88	2006	
115-02-6	Azaserine	2B	10, Sup 7	1987	
115-07-1	Propylene	3	Sup 7, 60	1994	
115-28-6	Chlorendic acid	2B	48	1990	
115-32-2	Dicofol	3	30, Sup 7	1987	
115-96-8	Tris(2-chloroethyl) phosphate	3	48, 71	1999	
116-06-3	Aldicarb	3	53	1991	
116-14-3	Tetrafluoroethylene	2A	19, Sup 7, 71, 110	2017	NB: Overall evaluation upgraded to Group 2A on the basis of sufficient evidence in experimental animals with a striking and atypical pattern of tumours
117-10-2	Dantron (Chrysazin; 1,8-Dihydroxyanthraquinone)	2B	50	1990	
117-39-5	Quercetin	3	Sup 7, 73	1999	
117-79-3	2-Aminoanthraquinone	3	27, Sup 7	1987	
117-81-7	Bis(2-ethylhexyl) phthalate (see Di(2-ethylhexyl) phthalate)				
117-81-7	Di(2-ethylhexyl)phthalate	2B	Sup 7, 77, 101	2013	
118-74-1	Hexachlorobenzene	2B	Sup 7, 79	2001	
118-92-3	Anthranilic acid	3	16, Sup 7	1987	
118-96-7	2,4,6-Trinitrotoluene	3	65	1996	
119-34-6	4-Amino-2-nitrophenol	3	16, Sup 7	1987	
119-61-9	Benzophenone	2B	101	2013	
119-90-4	3,3'-Dimethoxybenzidine (<i>ortho</i>-Dianisidine)	2B	4, Sup 7	1987	
119-93-7	3,3'-Dimethylbenzidine (<i>ortho</i>-Tolidine)	2B	1, Sup 7	1987	
120-12-7	Anthracene	3	92, Sup 7	2010	
120-58-1	Isosafrole	3	10, Sup 7	1987	
120-71-8	<i>para</i>-Cresidine	2B	27, Sup 7	1987	
120-80-9	Catechol	2B	15, Sup 7, 71	1999	
121-14-2	2,4-Dinitrotoluene	2B	65	1996	
121-66-4	2-Amino-5-nitrothiazole	3	31, Sup 7	1987	
121-69-7	<i>N</i>-<i>N</i>-Dimethylaniline	3	57	1993	
121-75-5	Malathion	2A	30, Sup 7, 112	2017	
121-88-0	2-Amino-5-nitrophenol	3	57	1993	
122-34-9	Simazine	3	53, 73	1999	
122-42-9	Propham	3	12, Sup 7	1987	
122-60-1	Phenyl glycidyl ether	2B	47, 71	1999	
123-31-9	Hydroquinone	3	15, Sup 7, 71	1999	
123-33-1	Maleic hydrazide	3	4, Sup 7	1987	
123-35-3	β -Myrcene	2B	119	2019	
123-91-1	1,4-Dioxane	2B	11, Sup 7, 71	1999	
124-48-1	Chlorodibromomethane	3	52, 71	1999	
124-58-3	Methylarsonic acid	2B	100C	2012	
124-58-3	Monomethylarsonic acid (see Methylarsonic acid)				
125-33-7	Primidone	2B	108	2016	
126-07-8	Griseofulvin	2B	Sup 7, 79	2001	
126-72-7	Tris(2,3-dibromopropyl) phosphate	2A	20, Sup 7, 71	1999	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
126-85-2	Nitrogen mustard <i>N</i>-oxide	2B	9, Sup 7	1987	
126-99-8	Chloroprene	2B	Sup 7, 71	1999	
127-07-1	Hydroxyurea	3	76	2000	
127-18-4	Tetrachloroethylene (Perchloroethylene)	2A	Sup 7, 63, 106	2014	
127-69-5	<i>N</i>-<i>N</i>-Dimethylacetamide	2B	123	In prep.	
127-69-5	Sulfafurazole (Sulfisoxazole)	3	24, Sup 7	1987	
128-37-0	Butylated hydroxytoluene (BHT)	3	40, Sup 7	1987	
128-66-5	Vat Yellow 4	3	48	1990	
129-00-0	Pyrene	3	Sup 7, 92	2010	
129-15-7	2-Methyl-1-nitroanthraquinone (uncertain purity)	2B	27, Sup 7	1987	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
129-17-9	Blue VRS	3	16, Sup 7	1987	
129-20-4	Oxyphenbutazone	3	13, Sup 7	1987	
129-43-1	1-Hydroxyanthraquinone	2B	82	2002	
131-79-3	Yellow OB	3	8, Sup 7	1987	
132-27-4	Sodium <i>ortho</i>-phenylphenate	2B	Sup 7, 73	1999	
132-65-0	Dibenzothiophene	3	103	2013	
133-06-2	Captan	3	30, Sup 7	1987	
134-32-7	1-Naphthylamine	3	4, Sup 7	1987	
135-88-6	<i>N</i>-Phenyl-2-naphthylamine	3	16, Sup 7	1987	
136-40-3	Phenazopyridine hydrochloride	2B	24, Sup 7	1987	
137-17-7	2,4,5-Trimethylaniline	3	27, Sup 7	1987	
137-26-8	Thiram	3	Sup 7, 53	1991	
137-30-4	Ziram	3	Sup 7, 53	1991	
138-59-0	Shikimic acid	3	40, Sup 7	1987	
139-05-9	Cyclamates (sodium cyclamate)	3	Sup 7, 73	1999	
139-13-9	Nitritotriacetic acid and its salts	2B	48, 73	1999	NB: Evaluated as a group
139-65-1	4,4'-Thiodianiline	2B	27, Sup 7	1987	
139-94-6	Nithiazide	3	31, Sup 7	1987	
140-11-4	Benzyl acetate	3	40, Sup 7, 71	1999	
140-56-7	<i>para</i>-Dimethylaminoazobenzenediazo sodium sulfonate	3	8, Sup 7	1987	
140-57-8	Aramite®	2B	5, Sup 7	1987	
140-88-5	Ethyl acrylate	2B	39, Sup 7, 71, 122	In prep.	
141-32-2	<i>n</i>-Butyl acrylate	3	39, Sup 7, 71	1999	
141-37-7	3,4-Epoxy-6-methylcyclohexylmethyl-3,4-epoxy-6-methylcyclo-hexanecarboxylate	3	11, Sup 7, 71	1999	
141-90-2	Thiouracil	2B	Sup 7, 79	2001	
142-83-6	2,4-Hexadienal	2B	101	2013	
143-50-0	Chlordecone (Kepone)	2B	20, Sup 7	1987	
143-67-9	Vinblastine sulfate	3	26, Sup 7	1987	
144-34-3	Methyl selenac	3	12, Sup 7	1987	
148-18-5	Sodium diethyldithiocarbamate	3	12, Sup 7	1987	
148-24-3	8-Hydroxyquinoline	3	13, Sup 7	1987	
148-82-3	Melphalan	1	9, Sup 7, 100A	2012	
149-29-1	Patulin	3	40, Sup 7	1987	
149-30-4	2-Mercaptobenzothiazole	2A	115	2018	
150-13-0	<i>para</i>-Aminobenzoic acid	3	16, Sup 7	1987	
150-68-5	Monuron	3	Sup 7, 53	1991	
150-69-6	Dulcin	3	12, Sup 7	1987	
151-56-4	Azirdine	2B	9, Sup 7, 71	1999	NB: Overall evaluation upgraded to Group 2B with supporting evidence from other relevant data
154-93-8	Bischloroethyl nitrosourea (BCNU)	2A	26, Sup 7	1987	
156-10-5	<i>para</i>-Nitrosodiphenylamine	3	27, Sup 7	1987	
156-51-4	Phenelzine sulfate	3	24, Sup 7	1987	
189-55-9	Dibenzo[<i>a</i>,<i>i</i>]pyrene	2B	92	2010	
189-64-0	Dibenzo[<i>a</i>,<i>h</i>]pyrene	2B	Sup 7, 92	2010	
191-07-1	Coronene	3	32, Sup 7, 92	1987	
191-24-2	Benzo[<i>ghi</i>]perylene	3	92, Sup 7	2010	
191-26-4	Anthanthrene	3	92, Sup 7	2010	
191-30-0	Dibenzo[<i>a</i>,<i>l</i>]pyrene	2A	Sup 7, 92	2010	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
192-47-2	Dibenzo[<i>h</i>,<i>rst</i>]pentaphene	3	Sup 7, 92	2010	
192-51-8	Dibenzo[<i>e</i>,<i>l</i>]pyrene	3	92	2010	
192-65-4	Dibenzo[<i>a</i>,<i>e</i>]pyrene	3	Sup 7, 92	2010	
192-97-2	Benzo[<i>e</i>]pyrene	3	92, Sup 7	2010	
193-09-9	Naphtho[2,3-<i>e</i>]pyrene	3	92	2010	
193-39-5	Indeno[1,2,3-<i>cd</i>]pyrene	2B	Sup 7, 92	2010	
194-59-2	7H-Dibenzo[<i>c</i>,<i>g</i>]carbazole	2B	32, Sup 7, 103	2013	
195-19-7	Benzo[<i>c</i>]phenanthrene	2B	92, Sup 7	2010	NB: Overall evaluation upgraded to Group 2B with supporting evidence from other relevant data
196-78-1	Benzo[<i>g</i>]chrysene	3	92	2010	
198-55-0	Perylene	3	Sup 7, 92	2010	
202-33-5	Benz[<i>j</i>]aceanthrylene	2B	92	2010	NB: Overall evaluation upgraded to Group 2B with supporting mechanistic and other relevant data
202-94-8	11H-Benz[<i>bc</i>]aceanthrylene	3	92	2010	
202-98-2	4H-Cyclopenta[<i>def</i>]chrysene	3	92	2010	
203-12-3	Benzo[<i>ghi</i>]fluoranthene	3	92, Sup 7	2010	
203-20-3	Naphtho[2,1-<i>a</i>]fluoranthene	3	92	2010	
203-33-8	Benzo[<i>a</i>]fluoranthene	3	92, Sup 7	2010	
205-12-9	Benzo[<i>c</i>]fluorene	3	92, Sup 7	2010	
205-82-3	Benzo[<i>j</i>]fluoranthene	2B	92	2010	
205-99-2	Benzo[<i>b</i>]fluoranthene	2B	92	2010	
206-44-0	Fluoranthene	3	Sup 7, 92	2010	
207-08-9	Benzo[<i>k</i>]fluoranthene	2B	92	2010	
207-83-0	13H-Dibenzo[<i>a</i>,<i>g</i>]fluorene	3	92	2010	
211-91-6	Benz[<i>l</i>]aceanthrylene	3	92	2010	
213-46-7	Picene	3	92	2010	
214-17-5	Benzo[<i>b</i>]chrysene	3	92	2010	
215-58-7	Dibenzo[<i>a</i>,<i>c</i>]anthracene	3	Sup 7, 92	2010	
217-59-4	Triphenylene	3	Sup 7, 92	2010	
218-01-9	Chrysene	2B	92	2010	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
224-41-9	Dibenz[<i>a,h</i>]anthracene	3	Sup 7, 92	2010	
224-42-0	Dibenz[<i>a,i</i>]acridine	2A	32, Sup 7, 103	2013	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
224-53-3	Dibenz[<i>a,h</i>]acridine	2B	103	2013	NB: Overall evaluation upgraded to Group 2B with supporting evidence from other relevant data
225-11-6	Benz[<i>a</i>]acridine	3	32, Sup 7, 103	2013	
225-51-4	Benz[<i>c</i>]acridine	3	32, Sup 7, 103	2013	
226-36-8	Dibenz[<i>a,h</i>]acridine	2B	32, Sup 7, 103	2013	
238-84-6	Benzo[<i>a</i>]fluorene	3	92, Sup 7	2010	
239-35-0	Benzo[<i>b</i>]naphtho[2,1-d]thiophene	3	103	2013	
243-17-4	Benzo[<i>b</i>]fluorene	3	92, Sup 7	2010	
262-12-4	Dibenzo[<i>a,h</i>]dioxin	3	69	1997	
271-89-6	Benzo[<i>a</i>]furan	2B	63	1995	
298-00-0	Methyl parathion	3	30, Sup 7	1987	
298-81-7	Methoxsalen (8-methoxypsoralen) plus ultraviolet A radiation	1	24, Sup 7, 100A	2012	
299-75-2	Treosulfan	1	26, Sup 7, 100A	2012	
302-01-2	Hydrazine	2A	4, Sup 7, 71, 115	2018	
302-17-0	Chloral hydrate	2A	63, 84, 106	2014	
303-34-4	Lasiocarpine	2B	10, Sup 7	1987	
303-47-9	Ochratoxin A	2B	Sup 7, 56	1993	
305-03-3	Chlorambucil	1	26, Sup 7, 100A	2012	
309-00-2	Aldrin (see Dieldrin, and aldrin metabolized to dieldrin)				
313-67-7	Aristolochic acid	1	82, 100A	2012	NB: Overall evaluation upgraded to Group 1 based on mechanistic and other relevant data
313-67-7	Aristolochic acid, plants containing	1	82, 100A	2012	
314-13-6	Evans blue	3	8, Sup 7	1987	
315-18-4	Zectran	3	12, Sup 7	1987	
315-22-0	Monocrotaline	2B	10, Sup 7	1987	
320-67-2	Azacitidine	2A	50	1990	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
331-39-5	Caffeic acid	2B	56	1993	
333-41-5	Diazinon	2A	112	2017	NB: Overall evaluation upgraded to Group 2A based on mechanistic evidence
334-88-3	Diazomethane	3	7, Sup 7	1987	
335-67-1	Perfluorooctanoic acid (PFOA)	2B	110	2017	
366-70-1	Procarbazine hydrochloride	2A	26, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
396-01-0	Triamterene	2B	108	2016	
420-12-2	Ethylene sulfide	3	11, Sup 7	1987	
439-14-5	Diazepam	3	Sup 7, 66	1996	
443-48-1	Metronidazole	2B	13, Sup 7	1987	
446-86-6	Azathioprine	1	26, Sup 7, 100A	2012	
480-54-6	Retrorsine	3	10, Sup 7	1987	
480-81-9	Seneciophylline	3	10, Sup 7	1987	
484-20-8	5-Methoxypsoralen	2A	40, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
492-17-1	2,4'-Diphenyldiamine	3	16, Sup 7	1987	
492-80-8	Auramine	2B	1, Sup 7, 99, 100F	2012	
493-52-7	Methyl red	3	8, Sup 7	1987	
494-03-1	Chlornaphazine	1	4, Sup 7, 100A	2012	
494-03-1	<i>N,N'</i> -Bis(2-chloroethyl)-2-naphthylamine (see Chlornaphazine)				
494-38-2	Acridine orange	3	16, Sup 7	1987	
501-30-4	Kojic acid	3	79	2001	
505-60-2	Mustard gas (see Sulfur mustard)				
505-60-2	Sulfur mustard	1	9, Sup 7, 100F	2012	
509-14-8	Tetranitromethane	2B	65	1996	
510-15-6	Chlorobenzilate	3	30, Sup 7	1987	
513-37-1	1-Chloro-2-methylpropene	2B	63	1995	
518-75-2	Citrinin	3	40, Sup 7	1987	
520-18-3	Kaempferol	3	31, Sup 7	1987	
523-44-4	CI Acid Orange 20	3	8, Sup 7	1987	
523-44-4	Orange I (see CI Acid Orange 20)				
523-50-2	Angelicin plus ultraviolet A radiation	3	40, Sup 7	1987	
531-76-0	Merphalan	2B	9, Sup 7	1987	
531-82-8	<i>N</i> -(4-(5-Nitro-2-furyl)-2-thiazolyl)acetamide	2B	7, Sup 7	1987	
532-82-1	Chrysoidine	3	8, Sup 7	1987	
536-33-4	Ethionamide	3	13, Sup 7	1987	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
540-73-8	1,2-Dimethylhydrazine	2A	4, Sup 7, 71	1999	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
541-73-1	<i>meta</i>-Dichlorobenzene	3	73	1999	
542-56-3	Isobutyl nitrite	2B	122	In prep.	
542-75-6	1,3-Dichloropropene (technical-grade)	2B	41, Sup 7, 71	1999	
542-78-9	Malonaldehyde	3	36, Sup 7, 71	1999	
542-88-1 107-30-2	Bis(chloromethyl)ether; chloromethyl methyl ether (technical-grade)	1	4, Sup 7, 100F	2012	
545-06-2	Trichloroacetonitrile	3	52, 71	1999	
545-55-1	Tris(1-aziridinyl)phosphine oxide	3	9, Sup 7	1987	
551-74-6	Mannomustine dihydrochloride	3	9, Sup 7	1987	
555-84-0	1-[(5-Nitrofurfurylidene)amino]-2-imidazolidinone	2B	7, Sup 7	1987	
556-52-5	Glycidol	2A	77	2000	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
562-10-7	Doxylamine succinate	3	79	2001	
563-41-7	Semicarbazide hydrochloride	3	12, Sup 7	1987	
563-47-3	3-Chloro-2-methylpropene, technical grade	2B	63, 115	2018	
569-61-9	CI Basic Red 9	2B	57, 99	2010	
581-89-5	2-Nitronaphthalene	3	46	1989	
592-62-1	Methylazoxymethanol acetate	2B	10, Sup 7	1987	
593-60-2	Vinyl bromide	2A	39, Sup 7, 71, 97	2008	NB: (1) Overall evaluation upgraded to Group 2A based on mechanistic and other relevant data; (2) For practical purposes, vinyl bromide should be considered to act similarly to the human carcinogen vinyl chloride
593-70-4	Chlorofluoromethane	3	41, Sup 7, 71	1999	
598-55-0	Methyl carbamate	3	12, Sup 7	1987	
599-79-1	Sulfasalazine	2B	108	2016	
602-60-8	9-Nitroanthracene	3	33, Sup 7	1987	
602-87-9	5-Nitroacenaphthene	2B	16, Sup 7	1987	
604-75-1	Oxazepam	2B	Sup 7, 66	1996	
606-20-2	2,6-Dinitrotoluene	2B	65	1996	
607-57-8	2-Nitrofluorene	2B	46, 105	2014	
609-20-1	2,6-Dichloro-<i>para</i>-phenylenediamine	3	39, Sup 7	1987	
611-06-3	2,4-Dichloro-1-nitrobenzene	2B	123	In prep.	
613-35-4	<i>N</i>-<i>N</i>-<i>N</i>-Diacylbenzidine	2B	16, Sup 7	1987	
615-05-4	2,4-Diaminoanisole	2B	Sup 7, 79	2001	
615-28-1	<i>ortho</i>-Phenylenediamine dihydrochloride	2B	123	In prep.	
615-53-2	<i>N</i>-Methyl-<i>N</i>-nitrosourethane	2B	4, Sup 7	1987	
618-85-9	3,5-Dinitrotoluene	3	65	1996	
621-64-7	<i>N</i>-Nitrosodi-<i>n</i>-propylamine	2B	17, Sup 7	1987	
627-12-3	<i>n</i>-Propyl carbamate	3	12, Sup 7	1987	
630-20-6	1,1,1,2-Tetrachloroethane	2B	41, Sup 7, 71, 106	2014	
631-64-1	Dibromoacetic acid	2B	101	2013	
632-99-5	Magenta	2B	Sup 7, 57, 99, 100F	2012	
637-07-0	Clofibrate	3	Sup 7, 66	1996	
641-48-5	Dihydroaceanthrylene	3	92	2010	
680-31-9	Hexamethylphosphoramide	2B	15, Sup 7, 71	1999	
684-93-5	<i>N</i>-Methyl-<i>N</i>-nitrosourea	2A	17, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
693-98-1	2-Methylimidazole	2B	101	2013	
712-68-5	2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole	2B	7, Sup 7	1987	
723-46-6	Sulfamethoxazole	3	Sup 7, 79	2001	
759-73-9	<i>N</i>-Ethyl-<i>N</i>-nitrosourea	2A	17, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
765-34-4	Glycidaldehyde	2B	11, Sup 7, 71	1999	
789-07-1	2-Nitropyrene	3	46	1989	
794-93-4	Dihydroxymethylfurazizine (see also Panfuran S)	3	24, Sup 7	1987	
794-93-4	Panfuran S (containing dihydroxymethylfurazizine)	2B	24, Sup 7	1987	
800-24-8	Aziridyl benzoquinone	3	9, Sup 7	1987	
804-36-4	Nitrovin	3	31, Sup 7	1987	
817-09-4	Trichlormethine (Trimustine hydrochloride)	2B	Sup 7, 50	1990	
822-36-6	4-Methylimidazole	2B	101	2013	
828-00-2	Dimethoxane	3	15, Sup 7	1987	
832-69-9	1-Methylphenanthrene	3	Sup 7, 92	2010	
838-88-0	4,4'-Methylene bis(2-methylaniline)	2B	4, Sup 7	1987	
842-07-9	Sudan I	3	8, Sup 7	1987	
846-50-4	Temazepam	3	66	1996	
868-85-9	Dimethyl hydrogen phosphite	3	48, 71	1999	
892-21-7	3-Nitrofluoranthene	3	33, Sup 7	1987	
915-67-3	Amaranth	3	8, Sup 7	1987	
924-16-3	<i>N</i>-Nitrosodi-<i>n</i>-butylamine	2B	17, Sup 7	1987	
930-55-2	<i>N</i>-Nitrosopyrrolidine	2B	17, Sup 7	1987	
989-38-8	Rhodamine 6G	3	16, Sup 7	1987	
1071-83-6	Glyphosate	2A	112	2017	
1072-52-2	2-(1-Aziridinyl)ethanol	3	9, Sup 7	1987	
1116-54-7	<i>N</i>-Nitrosodiethanolamine	2B	17, Sup 7, 77	2000	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
1120-71-4	1,3-Propane sultone	2A	4, Sup 7, 71, 110	2017	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
1143-38-0	Dithranol	3	13; Sup 7	1987	
1163-19-5	Decabromodiphenyl oxide	3	48, 71	1999	
1303-00-0	Gallium arsenide (see Arsenic and inorganic arsenic compounds)		86, 100C	2012	
1309-37-1	Ferric oxide	3	1, Sup 7	1987	
1309-64-4	Antimony trioxide	2B	47	1989	
1314-62-1	Vanadium pentoxide	2B	86	2006	
1317-60-8	Haematite	3	1, Sup 7	1987	
1318-02-1	Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites)	3	68	1997	NB: Mineral substances (e.g. talc or vermiculite) that contain asbestos should also be regarded as carcinogenic to humans *The presence of an asterisk indicates that the registration is for a substance which CAS does not treat in its regular CA index
1330-20-7	Xylenes	3	47, 71	1999	
1332-21-4 77536-67-5 12172-73-5 77536-66-4 12001-29-5 12001-28-4 77536-68-6*	Asbestos (all forms, including actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite)	1	14, Sup 7, 100C	2012	
1313-27-5	Molybdenum trioxide	2B	118	2018 online	
1333-86-4	Carbon black	2B	Sup 7, 65, 93	2010	
1336-36-3	Polychlorinated biphenyls	1	18, Sup 7, 107	2016	
1338-16-5	Iron sorbitol-citric acid complex	3	2, Sup 7	1987	
1345-04-6	Antimony trisulfide	3	47	1989	
1401-55-4	Tannic acid and tannins	3	10, Sup 7	1987	
1402-68-2	Aflatoxins (B1, B2, G1, G2, M1)	1	Sup 7, 56, 82, 100F	2012	
1464-53-5	1,2,3,4-Diepoxybutane (see <i>Monographs</i> on 1,3-Butadiene)		11, Sup 7	1987	
1582-09-8	Trifluralin	3	53	1991	
1615-80-1	1,2-Diethylhydrazine	2B	4, Sup 7, 71	1999	
1634-04-4	Methyl <i>tert</i> -butyl ether	3	73	1999	
1675-54-3	Bisphenol A diglycidyl ether (Araldite)	3	47, 71	1999	
1689-82-3	4-Hydroxyazobenzene	3	8, Sup 7	1987	
1694-09-3	Benzyl violet 4B	2B	16, Sup 7	1987	
1705-85-7	6-Methylchrysene	3	Sup 7, 92	2010	
1706-01-0	3-Methylfluoranthene	3	Sup 7, 92	2010	
1746-01-6	2,3,7,8-Tetrachlorodibenzo- <i>para</i> -dioxin	1	Sup 7, 69, 100F	2012	
1836-75-5	Nitrofen (technical-grade)	2B	30, Sup 7	1987	
1897-45-6	Chlorothalonil	2B	Sup 7, 73	1999	
1912-24-9	Atrazine	3	53, 73	1999	NB: Overall evaluation downgraded to Group 3 with supporting evidence from other relevant data
1918-02-1	Picloram	3	53	1991	
1936-15-8	CI Orange G	3	8, Sup 7	1987	
1936-15-8	Orange G (see CI Orange G)				
1937-37-7	CI Direct Black 38 (see Benzidine, dyes metabolized to)				
1954-28-5	Triethylene glycol diglycidyl ether	3	11, Sup 7, 71	1999	
2068-78-2	Vincristine sulfate	3	26, Sup 7	1987	
2164-17-2	Fluometuron	3	30, Sup 7	1987	
2168-68-5	Bis(1-aziridinyl)morpholinophosphine sulfide	3	9, Sup 7	1987	
2243-62-1	1,5-Naphthalenediamine	3	27, Sup 7	1987	
2303-16-4	Diallate	3	30, Sup 7	1987	
2318-18-5	Senkirkine	3	31, Sup 7	1987	
2353-45-9	Fast Green FCF	3	16, Sup 7	1987	
2385-85-5	Mirex	2B	20, Sup 7	1987	
2386-90-5	Bis(2,3-epoxycyclopentyl)ether	3	47, 71	1999	
2425-06-1	Captafol	2A	53	1991	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
2425-85-6	CI Pigment Red 3	3	57	1993	
2429-74-5	CI Direct Blue 15	2B	57	1993	
2432-99-7	11-Aminoundecanoic acid	3	39, Sup 7	1987	
2475-45-8	Disperse Blue 1	2B	48	1990	
2602-46-2	CI Direct Blue 6 (see Benzidine, dyes metabolized to)				
2646-17-5	Oil Orange SS	2B	8, Sup 7	1987	
2757-90-6	Agaritine	3	31, Sup 7	1987	
2783-94-0	Sunset Yellow FCF	3	8, Sup 7	1987	
2784-94-3	HC Blue No. 1	2B	57	1993	
2832-40-8	Disperse Yellow 3	3	48	1990	
2835-39-4	Allyl isovalerate	3	36, Sup 7, 71	1999	
2871-01-4	HC Red No. 3	3	57	1993	
2955-38-6	Prazepam	3	66	1996	
2973-10-6	Diisopropyl sulfate	2B	54, 71	1999	
3018-12-0	Dichloroacetonitrile	3	52, 71	1999	
3068-88-0	beta-Butyrolactone	2B	11, Sup 7, 71	1999	
3118-97-6	Sudan II	3	8, Sup 7	1987	
3173-72-6	1,5-Naphthalene diisocyanate	3	19, Sup 7, 71	1999	
3252-43-5	Dibromoacetonitrile	2B	52, 71, 101	2013	
3296-90-0	2,2-Bis(bromomethyl)propane-1,3-diol	2B	77	2000	
3351-28-8	1-Methylchrysene	3	Sup 7, 92	2010	
3351-30-2	4-Methylchrysene	3	Sup 7, 92	2010	
3351-31-3	3-Methylchrysene	3	Sup 7, 92	2010	
3351-32-4	2-Methylchrysene	3	Sup 7, 92	2010	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
3564-09-8	Ponceau 3R	2B	8, Sup 7	1987	
3567-69-9	Carmoisine	3	8, Sup 7	1987	
3570-75-0	2-(2-Formylhydrazino)-4-(5-nitro-2-furyl)thiazole	2B	7, Sup 7	1987	
3688-53-7	AF-2 [2-(2-Furyl)-3-(5-nitro-2-furyl)acrylamide]	2B	31, Sup 7	1987	
3697-24-3	5-Methylchrysene	2B	Sup 7, 92	2010	
3761-53-3	Ponceau MX	2B	8, Sup 7	1987	
3771-19-5	Nafenopin	2B	24, Sup 7	1987	
3778-73-2	Isophosphamide	3	26, Sup 7	1987	
3795-88-8	5-(Morpholinomethyl)-3-[(5-nitrofurfurylidene)-amino]-2-oxazolidinone	2B	7, Sup 7	1987	
3844-45-9	Brilliant Blue FCF, disodium salt	3	16, Sup 7	1987	
3902-71-4	4,5',8-Trimethylpsoralen	3	40, Sup 7	1987	
4063-41-6	4,5'-Dimethylangelicin plus ultraviolet A radiation	3	Sup 7	1987	
4170-30-3	Crotonaldehyde	3	63	1995	
4342-03-4	Dacarbazine	2B	26, Sup 7	1987	
4548-53-2	Ponceau SX	3	8, Sup 7	1987	
4549-40-0	<i>N</i>-Nitrosomethylvinylamine	2B	17, Sup 7	1987	
4657-93-6	5-Aminoacenaphthene	3	16, Sup 7	1987	
4680-78-8	Guinea Green B	3	16, Sup 7	1987	
5131-60-2	4-Chloro-<i>meta</i>-phenylenediamine	3	27, Sup 7	1987	
5141-20-8	Light Green SF	3	16, Sup 7	1987	
5160-02-1	D & C Red No. 9	3	Sup 7, 57	1993	
5307-14-2	1,4-Diamino-2-nitrobenzene	3	Sup 7, 57	1993	
5385-75-1	Dibenzo[<i>a</i>,<i>e</i>]fluoranthene	3	Sup 7, 92	2010	
5431-33-4	Glycidyl oleate	3	11, Sup 7	1987	
5456-28-0	Ethyl selenac	3	12, Sup 7	1987	
5522-43-0	1-Nitropyrene	2A	Sup 7, 46, 105	2014	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
5589-96-8	Bromochloroacetic acid	2B	101	2013	
5989-27-5	<i>d</i>-Limonene	3	56, 73	1999	NB: Overall evaluation downgraded to Group 3 with supporting evidence from other relevant data
6164-98-3	Chlordimeform	3	30, Sup 7	1987	
6358-53-8	Citrus Red No. 2	2B	8, Sup 7	1987	
6368-72-5	Sudan Red 7B	3	8, Sup 7	1987	
6373-74-6	CI Acid Orange 3	3	57	1993	
6416-57-5	Sudan Brown RR	3	8, Sup 7	1987	
6459-94-5	CI Acid Red 114	2B	57	1993	
6870-67-3	Jacobine	3	10, Sup 7	1987	
7099-43-6	5,6-Cyclopenteno-1,2-benzanthracene	3	92	2010	
7220-79-3	Methylene blue	3	108	2016	
7439-92-1	Lead	2B	23, Sup 7	1987	
7439-97-6	Mercury and inorganic mercury compounds	3	58	1993	
7440-02-0	Nickel, metallic and alloys	2B	Sup 7, 49	1990	
7440-07-5	Plutonium	1	78, 100D	2012	
7440-29-1	Thorium-232 and its decay products	1	78, 100D	2012	
7440-38-2	Arsenic and inorganic arsenic compounds	1	23, Sup 7, 100C	2012	
7440-41-7	Beryllium and beryllium compounds	1	Sup 7, 58, 100C	2012	
7440-43-9	Cadmium and cadmium compounds	1	58, 100C	2012	
7440-47-3	Chromium, metallic	3	Sup 7, 49	1990	
7440-48-4	Cobalt and cobalt compounds	2B	52	1991	NB: Evaluated as a group
7440-48-4	Cobalt metal without tungsten carbide	2B	86	2006	
7440-48-4 12070-12-1	Cobalt metal with tungsten carbide	2A	86	2006	
7446-09-5	Sulfur dioxide	3	54	1992	
7460-84-6	Glycidyl stearate	3	11, Sup 7	1987	
7481-89-2	Zalcitabine	2B	76	2000	
7496-02-8	6-Nitrochrysene	2A	Sup 7, 46, 105	2014	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
7519-36-0	<i>N</i>-Nitrosoproline	3	17, Sup 7	1987	
7572-29-4	Dichloroacetylene	3	39, Sup 7, 71	1999	
7631-86-9	Silica, amorphous	3	Sup 7, 68	1997	
7647-01-0	Hydrochloric acid	3	54	1992	
7664-93-9	Strong-inorganic-acid mists containing sulfuric acid (see Acid mists)				
7722-84-1	Hydrogen peroxide	3	36, Sup 7, 71	1999	
7758-01-2	Potassium bromate	2B	Sup 7, 73	1999	
7758-19-2	Sodium chlorite	3	52	1991	
7782-49-2	Selenium and selenium compounds	3	9, Sup 7	1987	
8001-35-2	Toxaphene (Polychlorinated camphenes)	2B	Sup 7, 79	2001	
8001-50-1	Terpene polychlorinates (Strobane®)	3	5, Sup 7	1987	
8001-58-9	Creosotes	2A	Sup 7, 92	2010	
8002-05-9	Crude oil	3	45	1989	
8007-45-2	Coal tars (see Coal-tar distillation)		35, Sup 7	1987	
8007-45-2	Coal-tar distillation	1	92, 100F	2012	
8018-07-3	Acriflavinium chloride	3	13, Sup 7	1987	
8047-67-4	Saccharated iron oxide	3	2, Sup 7	1987	
8052-42-4	Bitumens, extracts of steam-refined and air-refined; steam-refined, cracking-residue and air-refined bitumens (see Bitumens, occupational exposures)		35, Sup 7	1987	
8052-42-4 64741-56-6	Bitumens, occupational exposure to straight-run bitumens and their emissions during road paving	2B	103	2013	
9000-07-1	Carrageenan, native	3	31, Sup 7	1987	
9000-38-8	Kava extract	2B	108	2016	
9002-84-0	Polytetrafluoroethylene	3	19, Sup 7	1987	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
9002-86-2	Polyvinyl chloride	3	19, Sup 7	1987	
9002-88-4	Polyethylene	3	19, Sup 7	1987	
9002-89-5	Polyvinyl alcohol	3	19, Sup 7	1987	
9003-01-4	Polyacrylic acid	3	19, Sup 7	1987	
9003-07-0	Polypropylene	3	19, Sup 7	1987	
9003-20-7	Polyvinyl acetate	3	19, Sup 7	1987	
9003-22-9	Vinyl chloride-vinyl acetate copolymers	3	19, Sup 7	1987	
9003-39-8	Polyvinyl pyrrolidone	3	19, Sup 7, 71	1987	
9003-53-6	Polystyrene	3	19, Sup 7	1987	
9003-54-7	Styrene-acrylonitrile copolymers	3	19, Sup 7	1987	
9003-55-8	Styrene-butadiene copolymers	3	19, Sup 7	1987	
9004-51-7	Iron-dextrin complex	3	2, Sup 7	1987	
9004-66-4	Iron-dextran complex	2B	2, Sup 7	1987	
9009-54-5	Polyurethane foams	3	19, Sup 7	1987	
9010-98-4	Polychloroprene	3	19, Sup 7	1987	
9011-06-7	Vinylidene chloride-vinyl chloride copolymers	3	19, Sup 7	1987	
9011-14-7	Polymethyl methacrylate	3	19, Sup 7	1987	
9016-87-9	Polymethylene polyphenyl isocyanate	3	19, Sup 7	1987	
10026-24-1	Cobalt sulfate and other soluble cobalt(II) salts	2B	86	2006	
10043-66-0	Iodine-131 (see Radioiodines)				
10043-92-2	Radon-222 and its decay products	1	43, 78, 100D	2012	
10048-13-2	Sterigmatocystin	2B	10, Sup 7	1987	
10048-32-5	Parasorbic acid	3	10, Sup 7	1987	
10098-97-2	Strontium-90 (see Fission products)				
10380-28-6	Copper 8-hydroxyquinoline	3	15, Sup 7	1987	
10540-29-1	Tamoxifen	1	66, 100A	2012	NB: There is also conclusive evidence that tamoxifen reduces the risk of contralateral breast cancer in breast cancer patients
10595-95-6	<i>N</i>-Nitrosomethylethylamine	2B	17, Sup 7	1987	
10599-90-3	Chloramine	3	84	2004	
11056-06-7	Bleomycins	2B	26, Sup 7	1987	NB: Overall evaluation upgraded to Group 2B with supporting evidence from other relevant data
12001-79-5	Vitamin K substances	3	76	2000	
12070-12-1 7440-48-4	Tungsten carbide with cobalt metal (see Cobalt metal with tungsten carbide)				
12122-67-7	Zinc	3	12, Sup 7	1987	
12174-11-7	Attapulgit (see Palygorskite)				
12174-11-7	Palygorskite (Attapulgit) (long fibres, > 5 micrometres)	2B	68	1997	
12174-11-7	Palygorskite (Attapulgit)(short fibres, < 5 micrometres)	3	68	1997	
12192-57-3	Aurothioglucose	3	13, Sup 7	1987	
12427-38-2	Maneb	3	12, Sup 7	1987	
12663-46-6	Cyclochlorotine	3	10, Sup 7	1987	
13010-47-4	1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)	2A	26, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
13045-94-8	Medphalan	3	9, Sup 7	1987	
13233-32-4	Radium-224 and its decay products	1	78, 100D	2012	
13256-22-9	<i>N</i>-Nitrososarcosine	2B	17, Sup 7	1987	
13292-46-1	Rifampicin	3	24, Sup 7	1987	
13463-67-7	Titanium dioxide	2B	47, 93	2010	
13483-18-6	1,2-Bis(chloromethoxy)ethane	3	15; Sup 7, 71	1999	
13909-09-6	1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea (Methyl-CCNU) (see Semustine)				
13909-09-6	Semustine [1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea, Methyl-CCNU]	1	Sup 7, 100A	2012	
13982-63-3	Radium-226 and its decay products	1	78, 100D	2012	
13983-17-0	Wollastonite	3	Sup 7, 68	1997	
14047-09-7	3,3',4,4'-Tetrachloroazobenzene	2A	117	2019	NB: Overall evaluation upgraded to Group 2A
14484-64-1	Ferbam	3	12, Sup 7	1987	
14596-37-3	Phosphorus-32, as phosphate	1	78, 100D	2012	
14807-96-6	Talc containing asbestiform fibres (see Asbestos)		42, Sup 7	1987	
14807-96-6	Talc not containing asbestos or asbestiform fibres	3	42, Sup 7, 93	2010	
14807-96-6	Talc-based body powder (perineal use of)	2B	93	2010	
14808-60-7	Silica dust, crystalline, in the form of quartz or cristobalite	1	Sup 7, 68, 100C	2012	
14901-08-7	Cycasin	2B	10, Sup 7	1987	
15086-94-9	Eosin	3	15, Sup 7	1987	
15262-20-1	Radium-228 and its decay products	1	78, 100D	2012	
15501-74-3	Sepiolite	3	Sup 7, 68	1997	
15503-86-3	Isatidine	3	10, Sup 7	1987	
15625-89-5	Trimethylolpropane triacrylate, technical grade	2B	122	In prep.	
15663-27-1	Cisplatin	2A	26, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
15721-02-5	2,2',5,5'-Tetrachlorobenzidine	3	27, Sup 7	1987	
16065-83-1	Chromium (III) compounds	3	49	1990	
16071-86-6	CI Direct Brown 95 (see Benzidine, dyes metabolized to)				
16543-55-8 64091-91-4	<i>N</i>-Nitrosomonicotine (NNN) and 4-(<i>N</i>-Nitrosomethylamino)-1-(3-pyridyl)-1-butanone (NNK)	1	Sup 7, 89, 100E	2012	NB: Overall evaluation upgraded to Group 1 based on mechanistic and other relevant data
16568-02-8	Gyromitrin	3	31, Sup 7	1987	
16984-48-8	Fluorides (inorganic, used in drinking-water)	3	27, Sup 7	1987	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
17117-34-9	3-Nitrobenzanthrone	2B	105	2014	NB: Overall evaluation upgraded to Group 2B with supporting evidence from other relevant data
18540-29-9	Chromium (VI) compounds	1	Sup 7, 49, 100C	2012	
18883-66-4	Streptozotocin	2B	17, Sup 7	1987	
20073-24-9	3-Carboxyoxysoralen	3	40, Sup 7	1987	
20268-51-3	7-Nitrobenz[<i>a</i>]anthracene	3	46	1989	
20589-63-3	3-Nitroperylene	3	46	1989	
20830-75-5	Digoxin	2B	108	2016	
20830-81-3	Daunomycin	2B	10, Sup 7	1987	
20941-65-5	Ethyl tellurac	3	12, Sup 7	1987	
21259-20-1	T ₂ -Trichothecene	3	31, Sup 7	1987	
21884-44-6	Luteoskyrin	3	10, Sup 7	1987	
22248-79-9	Tetrachlorvinphos	2B	30, Sup 7, 112	2017	
22349-59-3	1,4-Dimethylphenanthrene	3	Sup 7, 92	2010	
22398-80-7	Indium phosphide	2A	86	2006	NB: Overall evaluation upgraded to Group 2A
22506-53-2	3,9-Dinitrofluoranthene	2B	46, 65, 105	2014	
22571-95-5	Symphytine	3	31, Sup 7	1987	
22966-79-6	Oestradiol mustard	3	9, Sup 7	1987	
22975-76-4	4,4'-Dimethylangelicin plus ultraviolet A radiation	3	Sup 7	1987	
23214-92-8	Adriamycin	2A	10, Sup 7	1987	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
23246-96-0	Riddelliine	2B	10, Sup 7, 82	2002	
23255-93-8	Hycanthone mesylate	3	13, Sup 7	1987	
23537-16-8	Rugulosin	3	40, Sup 7	1987	
23746-34-1	Potassium bis(2-hydroxyethyl)dithiocarbamate	3	12, Sup 7	1987	
24560-98-3	<i>cis</i> -9,10-Epoxyoctadecanoic acid	3	11, Sup 7, 71	1999	
24938-64-5	<i>para</i> -Aramid fibrils	3	68	1997	
25013-15-4	Vinyl toluene	3	60	1994	
25013-16-5	Butylated hydroxyanisole (BHA)	2B	40, Sup 7	1987	
25038-54-4	Nylon 6	3	19, Sup 7	1987	
25732-74-5	Acepyrene (3,4-dihydrocyclopenta[<i>a</i>]pyrene)	3	92	2010	
25812-30-0	Gemfibrozil	3	66	1996	
25962-77-0	<i>trans</i> -2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)-vinyl]-1,3,4-oxadiazole	2B	7, Sup 7	1987	
26148-68-5	A- α -C (2-Amino-9- <i>H</i> -pyrido[2,3- <i>b</i>]indole)	2B	40, Sup 7	1987	
26308-28-1	Ripazepam	3	66	1996	
26471-62-5	Toluene diisocyanates	2B	39, Sup 7, 71	1999	
26782-43-4	Hydroxysenkirine	3	10, Sup 7	1987	
27208-37-3	Cyclopenta[<i>a</i>]pyrene	2A	Sup 7, 92	2010	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
28434-86-8	3,3'-Dichloro-4,4'-diaminodiphenyl ether	2B	16, Sup 7	1987	
29069-24-7	Prednimustine	3	50	1990	
29291-35-8	<i>N</i> -Nitrosofolic acid	3	17, Sup 7	1987	
29767-20-2	Teniposide	2A	76	2000	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
29975-16-4	Estazolam	3	66	1996	
30310-80-6	<i>N</i> -Nitrosohydroxyproline	3	17, Sup 7	1987	
30516-87-1	Zidovudine (AZT)	2B	76	2000	
33229-34-4	HC Blue No. 2	3	57	1993	
33419-42-0	Etoposide	1	76, 100A	2012	NB: Overall evaluation upgraded to Group 1 based on mechanistic and other relevant data
33419-42-0 15663-27-1 11056-06-7	Etoposide in combination with cisplatin and bleomycin	1	76, 100A	2012	
33543-31-6	2-Methylfluoranthene	3	Sup 7, 92	2010	
37319-17-8	Pentosan polysulfate sodium	2B	108	2016	
37620-20-5	<i>N</i> -Nitrosoanabasine (NAB)	3	37, Sup 7, 89	2007	
38571-73-2	1,2,3-Tris(chloromethoxy)propane	3	15, Sup 7, 71	1999	
40762-15-0	Doxefazepam	3	66	1996	
42397-64-8	1,6-Dinitropyrene	2B	46, 105	2014	
42397-65-9	1,8-Dinitropyrene	2B	Sup 7, 46, 105	2014	
50926-11-9	Indium tin oxide	2B	118	2018 online	
51264-14-3	Amsacrine	2B	76	2000	
51481-61-9	Cimetidine	3	50	1990	
51630-58-1	Fenvalerate	3	53	1991	
52645-53-1	Permethrin	3	53	1991	
52918-63-5	Deltamethrin	3	53	1991	
53973-98-1	Carrageenan, degraded (Poligeenan)	2B	31, Sup 7	1987	
53973-98-1	Poligeenan (see Carrageenan, degraded)				
54749-90-5	Chlorozotocin	2A	50	1990	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
55557-01-2	<i>N</i> -Nitrosoguvacine	3	Sup 7, 85	2004	
55557-02-3	<i>N</i> -Nitrosoguvacoline	3	Sup 7, 85	2004	
56894-91-8	1,4-Bis(chloromethoxymethyl)benzene	3	15; Sup 7, 71	1999	
57018-52-7	1- <i>tert</i> -Butoxypropan-2-ol	2B	88, 119	2019	
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	1	100F	2012	NB: Overall evaluation upgraded to Group 1 based on mechanistic and other relevant data

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
57465-28-8	3,4,5,3',4'-Pentachlorobiphenyl (PCB-126)	1	100F	2012	See Polychlorinated biphenyls, dioxin-like, with a TEF according to WHO
57835-92-4	4-Nitropyrene	2B	46, 105	2014	
59277-89-3	Aciclovir	3	76	2000	
59536-65-1	Polybrominated biphenyls	2A	41, Sup 7, 107	2016	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data, namely mechanistic similarity with polychlorinated biphenyls classified in Group 1
59820-43-8	HC Yellow No. 4	3	57	1993	
59865-13-3 79217-60-0	Ciclosporin (see Cyclosporine)				
59865-13-3 79217-60-0	Cyclosporine	1	50, 100A	2012	
60102-37-6	Petasitenine	3	31, Sup 7	1987	
60153-49-3	3-(<i>N</i> -Nitrosomethylamino)propionitrile	2B	Sup 7, 85	2004	
62450-06-0	Trp-P-1 (3-Amino-1,4-dimethyl-5- <i>H</i> -pyrido[4,3- <i>b</i>]indole)	2B	31, Sup 7	1987	
62450-07-1	Trp-P-2 (3-Amino-1-methyl-5- <i>H</i> -pyrido[4,3- <i>b</i>]indole)	2B	31, Sup 7	1987	
63041-90-7	6-Nitrobenzo[<i>a</i>]pyrene	3	Sup 7, 46	1989	
64436-13-1	Arsenobetaine and other organic arsenic compounds that are not metabolized in humans	3	100C	2012	
64742-93-4	Bitumens, occupational exposure to oxidized bitumens and their emissions during roofing	2A	103	2013	
65271-80-9	Mitoxantrone	2B	76	2000	
65996-93-2	Coal-tar pitch	1	35, Sup 7, 100F	2012	
66733-21-9	Erionite	1	42, Sup 7, 100C	2012	
67730-10-3	Glu-P-2 (2-Aminopyrido[1,2- <i>a</i>]-3,2'- <i>d</i> imidazole)	2B	40, Sup 7	1987	
67730-11-4	Glu-P-1 (2-Amino-6-methylpyrido[1,2- <i>a</i>]-3,2'- <i>d</i> imidazole)	2B	40, Sup 7	1987	
68006-83-7	MeA- α -C (2-Amino-3-methyl-9- <i>H</i> -pyrido[2,3- <i>b</i>]indole)	2B	40, Sup 7	1987	
68308-34-9	Shale oils	1	35, Sup 7, 100F	2012	
68603-42-9	Coconut oil diethanolamine condensate	2B	101	2013	
69655-05-6	Didanosine	3	76	2000	
71267-22-6	<i>N</i> -Nitrosoanatabine (NAT)	3	37, Sup 7, 89	2007	
73459-03-7	5-Methylangelicin plus ultraviolet A radiation	3	Sup 7	1987	
75321-20-9	1,3-Dinitropyrene	2B	46, 105	2014	
76180-96-6	IQ (2-Amino-3-methylimidazo[4,5- <i>f</i>]quinoline)	2A	Sup 7, 56	1993	NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data
77094-11-2	MeIQ (2-Amino-3,4-dimethylimidazo[4,5- <i>f</i>]quinoline)	2B	Sup 7, 56	1993	
77439-76-0	3-Chloro-4-(dichloromethyl)-5-hydroxy-2,6- <i>H</i> -furanone	2B	84	2004	
77500-04-0	MeIQx (2-Amino-3,8-dimethylimidazo[4,5- <i>f</i>]quinoxaline)	2B	Sup 7, 56	1993	
82413-20-5	Droloxifene	3	66	1996	
83463-62-1	Bromochloroacetonitrile	3	52, 71	1999	
85502-23-4	3-(<i>N</i> -Nitrosomethylamino)propionaldehyde	3	Sup 7, 85	2004	
85878-62-2	Pyrido[3,4- <i>c</i>]psoralen	3	40, Sup 7	1987	
85878-63-3	7-Methylpyrido[3,4- <i>c</i>]psoralen	3	40, Sup 7	1987	
87625-62-5	Ptaquiloside	3	40, Sup 7	1987	
89778-26-7	Toremifene	3	66	1996	
90045-36-6	<i>Ginkgo biloba</i> extract	2B	108	2016	
90370-29-9	4,4',6'-Trimethylangelicin plus ultraviolet A radiation	3	Sup 7	1987	
90456-67-0	[deleted] 924-42-5				
	<i>N</i> -Methylolacrylamide	3	60	1994	
101043-37-2	Microcystin-LR	2B	94	2010	
105650-23-5	PhIP (2-Amino-1-methyl-6-phenylimidazo[4,5- <i>b</i>]pyridine)	2B	56	1993	
105735-71-5	3,7-Dinitrofluoranthene	2B	46, 65, 105	2014	
111025-46-8	Pioglitazone	2A	108	2016	
111189-32-3	Naphtho[1,2- <i>b</i>]fluoranthene	3	92	2010	
116355-83-0	Fumonisin B ₁	2B	82	2002	
116355-83-0	<i>Fusarium moniliforme</i> , toxins derived from (fumonisin B ₁ , fumonisin B ₂ , and fusarin C)	2B	56	1993	
118399-22-7	Nodularins	3	94	2010	
122320-73-4	Rosiglitazone	3	108	2016	
308068-56-6	Carbon nanotubes, multiwalled MWCNT-7	2B	111	2017	
308068-56-6	Carbon nanotubes, multiwalled, other than MWCNT-7	3	111	2017	
308068-56-6	Carbon nanotubes, single-walled	3	111	2017	
308068-56-6	Multiwalled carbon nanotubes MWCNT-7 (see Carbon nanotubes, multiwalled MWCNT-7)				
308068-56-6	Multiwalled carbon nanotubes other than MWCNT-7 (see Carbon nanotubes, multiwalled, other than MWCNT-7)				
308068-56-6	Single-walled carbon nanotubes (see Carbon nanotubes, single-walled)				
308076-74-6	Silicon carbide, fibrous	2B	111	2017	
409-21-2	Silicon carbide whiskers	2A	111	2017	
	Acheson process, occupational exposure associated with	1	111	2017	
	Acid mists, strong inorganic	1	54, 100F	2012	
	Acrylic fibres	3	19, Sup 7	1987	
	Acrylonitrile-butadiene-styrene copolymers	3	19, Sup 7	1987	
	Alcoholic beverages	1	44, 96, 100E	2012	
	<i>Aloe vera</i> , whole leaf extract	2B	108	2016	
	Alpha particles (see Radionuclides)				
	Aluminium production	1	34, Sup 7, 92, 100F	2012	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
	Anaesthetics, volatile	3	11, Sup 7	1987	
	Androgenic (anabolic) steroids	2A	Sup 7	1987	
	Areca nut	1	85, 100E	2012	
	Art glass, glass containers and pressed ware (manufacture of)	2A	58	1993	
	Auramine production	1	Sup 7, 99, 100F	2012	
	Benzidine, dyes metabolized to	1	99, 100F	2012	NB: Overall evaluation upgraded to Group 1 based on mechanistic and other relevant data
	Beta particles (see Radionuclides)				
	Betel quid with tobacco	1	Sup 7, 85, 100E	2012	
	Betel quid without tobacco	1	Sup 7, 85, 100E	2012	
	Biomass fuel (primarily wood), indoor emissions from household combustion of	2A	95	2010	
	Bisulfites	3	54	1992	
	Bitumens, occupational exposure to hard bitumens and their emissions during mastic asphalt work	2B	103	2013	
	BK polyomavirus (BKV)	2B	104	2014	
	Boot and shoe manufacture and repair (see Leather dust, Benzene)		25, Sup 7	1987	
	Bracken fern	2B	40, Sup 7	1987	
	Calcium carbide production	3	92	2010	
	Carbon electrode manufacture	2A	92	2010	
	Carpentry and joinery	2B	25, Sup 7	1987	
	Ceramic implants	3	74	1999	
	Chimney sweeping (see Soot)		92	2010	
	Chlorinated drinking-water	3	52	1991	
	Chlorinated paraffins of average carbon chain length C12 and average degree of chlorination approximately 60%	2B	48	1990	
	Chlorophenols (see Polychlorophenols)				
	Chlorophenoxy herbicides	2B	41, Sup 7	1987	
	<i>Clonorchis sinensis</i> (infection with)	1	61, 100B	2012	
	Coal dust	3	68	1997	
	Coal gasification	1	Sup 7, 92, 100F	2012	
	Coal, indoor emissions from household combustion of	1	95, 100E	2012	
	Coffee, drinking	3	51, 116	2018 online	NB: There is "evidence suggesting lack of carcinogenicity" in humans of coffee drinking for cancers of the pancreas, liver, female breast, uterine endometrium, and prostate. Inverse associations with coffee drinking have been observed with cancers of the liver and uterine endometrium.
	Coke production	1	Sup 7, 92, 100F	2012	
	Continuous glass filament (see Glass filament)				
	Dental materials	3	74	1999	
	Diesel engine exhaust (see Engine exhaust, diesel)				
	Diesel fuel, marine	2B	45	1989	NB: Overall evaluation upgraded to Group 2B with supporting evidence from other relevant data
	Diesel fuels, distillate (light)	3	45	1989	
	Dry cleaning (occupational exposures in)	2B	63	1995	
	Dyes metabolized to benzidine (see Benzidine, dyes metabolized to)				
	Electric fields, extremely low-frequency	3	80	2002	
	Electric fields, static	3	80	2002	
	Engine exhaust, diesel	1	46, 105	2014	
	Engine exhaust, gasoline	2B	46, 105	2014	
	Epstein-Barr virus	1	70, 100B	2012	
	Estrogen therapy, postmenopausal	1	72, 100A	2012	
	Estrogen-progestogen menopausal therapy (combined)	1	72, 91, 100A	2012	
	Estrogen-progestogen oral contraceptives (combined)	1	72, 91, 100A	2012	NB: There is also convincing evidence in humans that these agents confer a protective effect against cancer in the endometrium and ovary
	Firefighter (occupational exposure as a)	2B	98	2010	
	Fission products, including strontium-90	1	100D	2012	
	Flat-glass and specialty glass (manufacture of)	3	58	1993	
	Fluorescent lighting	3	55	1992	
	Fluoro-edenite fibrous amphibole	1	111	2017	
	Foreign bodies (see Ceramic implants, Dental materials, Implanted foreign bodies, Metallic implants, Organic polymeric materials, Orthopaedic implants, Polymeric implants, Silicone breast implants)				
	Frying, emissions from high-temperature	2A	95	2010	
	Fuel oils, distillate (light)	3	45	1989	
	Fuel oils, residual (heavy)	2B	45	1989	
	Furniture and cabinet making (see Wood dust)		25, Sup 7	1987	
	<i>Fusarium graminearum</i>, <i>F. culmorum</i>, and <i>F. crookwellense</i>, toxins derived from (zearalenone, deoxynivalenol, nivalenol, and fusarenone X)	3	Sup 7, 56	1993	
	<i>Fusarium sporotrichioides</i>, toxins derived from (T-2 toxin)	3	56	1993	
	Gamma-Radiation (see X- and Gamma-Radiation)				
	Gasoline	2B	45	1989	NB: Overall evaluation upgraded to Group 2B with supporting evidence from other relevant data

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
	Gasoline engine exhaust (see Engine exhaust, gasoline)				
	Glass filament, continuous	3	43, 81	2002	
	Goldenseal root powder	2B	108	2016	
	Haematite mining (underground)	1	1, Sup 7, 100D	2012	
	Hair colouring products (personal use of)	3	57, 99	2010	
	Hairdresser or barber (occupational exposure as a)	2A	57, 99	2010	
	<i>Helicobacter pylori</i> (infection with)	1	61, 100B	2012	
	Hepatitis B virus (chronic infection with)	1	59, 100B	2012	
	Hepatitis C virus (chronic infection with)	1	59, 100B	2012	
	Hepatitis D virus	3	59	1994	
	Hexachlorocyclohexanes	2B	20, Sup 7	1987	
	High-temperature frying (see Frying)				
	Household combustion of biomass fuel (see Biomass fuel, indoor emissions from household combustion of)				
	Household combustion of coal (see Coal, indoor emissions from household combustion)				
	Human herpesvirus type 4 (see Epstein-Barr virus)				
	Human herpesvirus type 8 (see Kaposi sarcoma herpesvirus)				
	Human immunodeficiency virus type 1 (infection with)	1	67, 100B	2012	
	Human immunodeficiency virus type 2 (infection with)	2B	67	1996	
	Human papillomavirus genus beta (except types 5 and 8) and genus gamma	3	90, 100B	2012	
	Human papillomavirus type 68	2A	100B	2012	
	Human papillomavirus types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59	1	64, 90, 100B	2012	NB: The HPV types that have been classified as carcinogenic to humans can differ by an order of magnitude in risk for cervical cancer
	Human papillomavirus types 26, 53, 66, 67, 70, 73, 82	2B	100B	2012	
	Human papillomavirus types 30, 34, 69, 85, 97	2B	100B	2012	NB: Classified by phylogenetic analogy to the HPV genus alpha types classified in Group 1
	Human papillomavirus types 5 and 8 (in patients with epidermodysplasia verruciformis)	2B	100B	2012	
	Human papillomavirus types 6 and 11	3	90, 100B	2012	
	Human T-cell lymphotropic virus type I	1	67, 100B	2012	
	Human T-cell lymphotropic virus type II	3	67	1996	
	Hypochlorite salts	3	52	1991	
	Implanted foreign bodies of metallic chromium or titanium and of cobalt-based, chromium-based, and titanium-based alloys, stainless steel and depleted uranium	3	74	1999	
	Implanted foreign bodies of metallic cobalt, metallic nickel and an alloy powder containing 66-67% nickel, 13-16% chromium, and 7% iron	2B	74	1999	
	Insulation glass wool	3	43, 81	2002	
	Involuntary smoking (see Tobacco smoke, second-hand)				
	Ionizing radiation (all types)	1	100D	2012	
	Iron and steel founding (occupational exposure during)	1	34, Sup 7, 100F	2012	
	Isopropyl alcohol manufacture using strong acids	1	Sup 7, 100F	2012	
	Isopropyl oils	3	15, Sup 7, 71	1999	
	JC polyomavirus (JCV)	2B	104	2014	
	Jet fuel	3	45	1989	
	Kaposi sarcoma herpesvirus	1	70, 100B	2012	
	Lead compounds, inorganic	2A	Sup 7, 87	2006	
	Lead compounds, organic	3	23, Sup 7, 87	2006	NB: Organic lead compounds are metabolized at least in part, to ionic lead both in humans and animals. To the extent that ionic lead, generated from organic lead, is present in the body, it will be expected to exert the toxicities associated with inorganic lead
	Leather dust	1	100C	2012	
	Leather goods manufacture	3	25, Sup 7	1987	
	Leather tanning and processing	3	25, Sup 7	1987	
	Lumber and sawmill industries (including logging)	3	25, Sup 7	1987	
	Madder root (<i>Rubia tinctorum</i>)	3	82	2002	
	Magenta production	1	Sup 7, 57, 99, 100F	2012	
	Magnetic fields, extremely low-frequency	2B	80	2002	
	Magnetic fields, static	3	80	2002	
	Malaria (caused by infection with <i>Plasmodium falciparum</i> in holoendemic areas)	2A	104	2014	
	Mate, not very hot (drinking)	3	51, 116	2018 online	
	Mate, hot (see Very hot beverages)				
	Merkel cell polyomavirus (MCV)	2A	104	2014	
	Metabisulfites	3	54	1992	
	Metallic implants prepared as thin smooth films	2B	74	1999	
	Methylmercury compounds	2B	58	1993	NB: Evaluated as a group
	<i>Microcystis</i> extracts	3	94	2010	
	Mineral oils, highly-refined	3	33, Sup 7	1987	
	Mineral oils, untreated or mildly treated	1	33, Sup 7, 100F	2012	
	Modacrylic fibres	3	19, Sup 7	1987	
	MOOP and other combined chemotherapy including alkylating agents	1	Sup 7, 100A	2012	
	Neutron radiation	1	75, 100D	2012	NB: Overall evaluation upgraded to Group 1 with supporting evidence from other relevant data

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
	Nickel compounds	1	Sup 7, 49, 100C	2012	
	Nickel refining (see Nickel compounds)		11	1976	
	Nitrate or nitrite (ingested) under conditions that result in endogenous nitrosation	2A	94	2010	
	Non-arsenical insecticides (occupational exposures in spraying and application of)	2A	53	1991	
	Oestrogen (see Estrogen)				
	<i>Opisthorchis felineus</i> (infection with)	3	61	1994	
	<i>Opisthorchis viverrini</i> (infection with)	1	61, 100B	2012	
	Oral contraceptives, combined estrogen-progestogen (see Estrogen-progestogen oral contraceptives)				
	Organic polymeric materials	3	74	1999	
	Orthopaedic implants of complex composition and cardiac pacemakers	3	74	1999	
	Outdoor air pollution	1	109	2016	
	Outdoor air pollution, particulate matter in	1	109	2016	
	Paint manufacture (occupational exposure in)	3	47	1989	
	Painter (occupational exposure as a)	1	47, 98, 100F	2012	
	Particulate matter in outdoor air pollution (see Outdoor air pollution, particulate matter in)				
	Paving and roofing with coal-tar pitch (see Coal-tar pitch)		35, Sup 7, 92, 100F	2010	
	Petroleum refining (occupational exposures in)	2A	45	1989	
	Petroleum solvents	3	47	1989	
	Phenacetin, analgesic mixtures containing	1	Sup 7, 100A	2012	
	Pickled vegetables (traditional Asian)	2B	56	1993	
	Polychlorinated biphenyls, dioxin-like, with a Toxicity Equivalency Factor (TEF) according to WHO (PCBs 77, 81, 105, 114, 118, 123, 126, 156, 157, 167, 169, 189)	1	107	2016	NB: Overall evaluation upgraded to Group 1 with strong supporting evidence from other relevant data
	Polychlorinated dibenzofurans (see 2,3,4,7,8-Pentachlorodibenzofuran)	3	69	1997	
	Polychlorinated dibenzo-<i>para</i>-dioxins (other than 2,3,7,8-tetrachlorodibenzo-<i>para</i>-dioxin)	3	69	1997	
	Polychlorophenols and their sodium salts (mixed exposures) (see Pentachlorophenol; 2,4,6-Trichlorophenol)	2B	53, 71	1999	
	Polymeric implant prepared as thin smooth films (with the exception of poly-glycolic acid)	2B	74	1999	
	Printing inks	3	65	1996	
	Printing processes (occupational exposures in)	2B	65	1996	
	Processed meat (consumption of)	1	114	2018	
	Proflavine salts	3	24, Sup 7	1987	
	Progestins	2B	Sup 7	1987	
	Progestogen-only contraceptives	2B	72	1999	
	Pulp and paper manufacture	3	25, Sup 7	1987	
	Radiofrequency electromagnetic fields	2B	102	2013	
	Radioiodines, including iodine-131	1	78, 100D	2012	
	Radionuclides, alpha-particle-emitting, internally deposited	1	78, 100D	2012	NB: Specific radionuclides for which there is sufficient evidence in humans are also listed individually as Group 1 agents
	Radionuclides, beta-particle-emitting, internally deposited	1	78, 100D	2012	NB: Specific radionuclides for which there is sufficient evidence in humans are also listed individually as Group 1 agents
	Red meat (consumption of)	2A	114	2018	
	Refractory ceramic fibres	2B	43, 81	2002	
	Rock (stone) wool	3	43, 81	2002	
	Rubber manufacturing industry	1	28, Sup 7, 100F	2012	
	Salted fish, Chinese-style	1	56, 100E	2012	
	<i>Schistosoma haematobium</i> (infection with)	1	61, 100B	2012	
	<i>Schistosoma japonicum</i> (infection with)	2B	61	1994	
	<i>Schistosoma mansoni</i> (infection with)	3	61	1994	
	Shiftwork that involves circadian disruption	2A	98	2010	
	Silicone breast implants	3	74	1999	
	Slag wool	3	43, 81	2002	
	Solar radiation	1	55, 100D	2012	
	Soot (as found in occupational exposure of chimney sweeps)	1	35, Sup 7, 92, 100F	2012	
	Special-purpose fibres such as E-glass and '475' glass fibres	2B	81	2002	
	Sulfites	3	54	1992	
	Sunlamps and sunbeds (see Ultraviolet-emitting tanning devices)				
	Surgical implants (see Ceramic implants, Dental materials, Implanted foreign bodies, Metallic implants, Organic polymeric materials, Orthopaedic implants, Polymeric implants, Silicone breast implants)				
	SV40 polyomavirus	3	104	2014	
	Tea	3	51	1991	

Agents Classified by the IARC Monographs , Volumes 1–123					
CAS No.	Agent	Group	Volume	Year	Additional information
	Tetrakis(hydroxymethyl)phosphonium salts	3	48, 71	1999	
	Textile manufacturing industry (work in)	2B	48	1990	
	Tobacco smoke, second-hand	1	83, 100E	2012	
	Tobacco smoking	1	83, 100E	2012	
	Tobacco, smokeless	1	Sup 7, 89, 100E	2012	
	Toxins derived from certain <i>Fusarium</i> species (see <i>Fusarium</i>)				
	Ultraviolet radiation (wavelengths 100-400 nm, encompassing UVA, UVB, and UVC)	1	55, 100D*, 118#	2018 online	*Volume 100D concluded that there is <i>insufficient evidence</i> for ocular melanoma in welders; #Volume 118 concluded that ultraviolet emissions from welding are carcinogenic to humans (Group 1). There is <i>sufficient evidence</i> in humans for the carcinogenicity of ultraviolet emissions from welding)
	Ultraviolet-emitting tanning devices	1	100D	2012	
	Urethane (see Ethyl carbamate)				
	Very hot beverages at above 65 °C (drinking)	2A	116	2018 online	
	Welding fumes	1	49, 118	2018 online	
	Wood dust	1	62, 100C	2012	
	Wood smoke (see Biomass fuel, indoor emissions from household combustion)				
	X- and Gamma-Radiation	1	75, 100D	2012	
	Last update, 25 March 2019				